STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: September 24, 2015 Permit Number: 970395P

Date Expires: September 23, 2017

Issued To: Installation Address:
New Cingular Wireless PCS, LLC 219 Lebanon Road

dba AT&T Mobility Kingsport

Installation Description: Emission Source Reference No.

Emergency Stationary Compression Ignition (CI) 82-0502-01

Internal Combustion Engine (ICE)

NSPS Subpart IIII

GEN 1 NESHAP Subpart ZZZZ

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated May 28, 2015, and is signed by Jalayna Bolden, Assistant Secretary for the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

TAPCR 1200-03-09-.01(1)(d)

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

Jany R. Stephens

- 2. The design rated power for the emergency stationary compression ignition (CI) internal combustion engine (ICE) associated with this source is 72.4 horsepower. Any increase in this capacity will require a construction permit. TAPCR 1200-03-09-.01(1)(d) and the application dated May 28, 2015
- 3. On the permit application, the permittee stated that this emergency stationary CI internal combustion engine is used for emergency purposes. The permittee has requested that allowable emissions be calculated using 500 hours per year. This condition is for informational purposes only and is not a limitation. TAPCR 1200-03-09-.01(1)(d) and the application dated May 28, 2015
- 4. This emission source is subject to the requirements of 40 CFR part 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, and 40 CFR §80.510(b). The applicable requirements of 40 CFR parts 60, 63, and 80 are incorporated into this permit pursuant to Tennessee Air Pollution Control Regulations (TAPCR) 1200-03-09-.03(8)
- 5. Stationary Reciprocating Internal Combustion Engines (RICE) as defined in 40 CFR §63.6585(a) are subject to National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 63, Subpart ZZZZ. This facility is currently designated as an area source of Hazardous Air Pollutants (HAPs) as defined in 40 CFR §63.6585(c) of subpart ZZZZ. Pursuant to 40 CFR §63.6590(c), a new stationary RICE located at an area source of HAP emissions shall meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for this emergency stationary CI internal combustion engine under 40 CFR Part 63. In order to comply with 40 CFR Part 60, Subpart IIII, the emergency stationary CI internal combustion engine must comply with Conditions 11 20 of this permit.
- 6. Only diesel fuel that meets the requirements of **Condition 13** shall be used as fuel for this source. TAPCR 1200-03-09-.01(1)(d) and the application dated May 28, 2015
- 7. Particulate matter (TSP) emitted from this source shall not exceed 0.6 lbs/MMBtu (0.31 lbs/hr and 0.077 tons/year). Compliance with these emission limitations is based on compliance with **Conditions 2 and 6** of this permit and maintaining the manufacturer's specifications and operating the engine in accordance with the manufacturer's requirement and usage of ULSD. TAPCR 1200-03-06-.02(2)
- 8. Sulfur dioxide (SO₂) emitted from this source shall not exceed 0.15 lbs/hr (0.037 tons/year). Compliance with these emission limitations is based on compliance with **Conditions 2 and 6** of this permit and utilizing *EPA AP-42*, *Chapter 3, Section 3, Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines, dated October 1996.* TAPCR 1200-03-14-.03(5)
- 9. Carbon monoxide (CO) emitted from this source shall not exceed 0.48 lbs/hr (0.12 tons/year). Compliance with these emission limitations is based on compliance with **Conditions 2 and 6** of this permit and utilizing *EPA AP-42*, *Chapter 3, Section 3, Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines, dated October 1996.* TAPCR 1200-03-07-.07(2)
- 10. Volatile organic compounds (VOC) emitted from this source shall not exceed 0.18 lbs/hr (0.045 tons/year). Compliance with these emission limitations is based on compliance with **Conditions 2 and 6** of this permit and utilizing *EPA AP-42*, *Chapter 3*, *Section 3*, *Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines, dated October 1996*. TAPCR 1200-03-07-.07(2)
- 11. Pursuant to 40 CFR §60.4205(a), oxides of nitrogen (NO_X) emitted from this source shall not exceed 9.2 grams per kilowatt-hour (1.10 lbs/hr and 0.27 tons/year). Compliance with this limit shall be indicated by compliance with Conditions 2, 12, 13, 15, 16, 17, 19, and the records required by Condition 18.

- 12. Pursuant to 40 CFR §60.4206, the permittee must operate and maintain the emergency stationary CI internal combustion engine that achieves the emission standard as required in **Condition 11** over the entire life of the engine.
- 13. Pursuant to 40 CFR §60.4207(b) and 40 CFR §80.510(b), the permittee must use diesel fuel that meets the following per-gallon standards:
 - (a) Sulfur content of 15 ppm maximum.
 - (b) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.

The permittee shall maintain purchase receipts, vendor certifications, material safety data sheets, or other records to demonstrate that all fuel purchased for this source meets the requirements of this condition (any fuel labeled as ultra-low sulfur non-highway diesel fuel or ultra-low sulfur highway diesel fuel meets these requirements). These records shall be made available to the Technical Secretary for inspection upon request. These records must be maintained for a period of at least (2) years from the purchase date.

- 14. The emergency stationary CI internal combustion engine must be equipped with a non-resettable hour meter. TAPCR 1200-03-09
- 15. Pursuant to 40 CFR §60.4211(a), the permittee shall operate and maintain the emergency stationary CI internal combustion engine and control device according to the manufacturer's written instructions and may only change those settings that are permitted by the manufacturer.
- 16. Pursuant to 40 CFR §60.4211(b), the permittee shall comply with the emission standard in **Condition 11** by keeping records of engine manufacturer data indicating compliance with that standard.
- 17. Pursuant to 40 CFR §60.4211(f), the permittee must operate the emergency stationary CI internal combustion engine according to the requirements in paragraphs (1) through (3) of this condition. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this condition, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (1) through (3) of this condition, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) of this condition. Except as provided in paragraph (3)(i) of this condition, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- 18. The permittee must keep monthly records of the hours of operation of the emergency stationary CI internal combustion engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for the following categories: (a) emergency operation, as specified in **Condition 17**, Paragraph (1), including what classified the operation as emergency; (b) maintenance checks and readiness testing, demand response, as specified in **Condition 17**, Paragraph (2); and (c) non-emergency operation, as specified in **Condition 17**, Paragraph (3). The permittee shall calculate the operating hours per calendar year. The permittee shall maintain the following log format or an alternative format which readily provides the same required information. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required. This log shall be retained for a period of not less than two (2) years and shall be made available for inspection by the Technical Secretary or his representative upon request.

MONTHLY/YEARLY LOG: Source 82-0502-01

Year:					
	Operating Hours per Month				
Month	Maintenance checks & readiness testing	Other non-emergency operation	Emergency operation	Comments**	
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Totals					

^{**} The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.

TAPCR 1200-03-10-.02(2)(a)

19. Pursuant to 40 CFR §60.4211(g), if the permittee does not install, configure, operate, and maintain the emergency stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

The permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee does not install and configure the emergency stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, or changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

- 20. Pursuant to 40 CFR §60.4218, Table 8 (ATTACHMENT #1) to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 are applicable.
- Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)
- 22. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards. TAPCR 1200-03-09-.03(8)
- 23. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application. TAPCR 1200-03-09-.01(1)(d) and the application dated May 28, 2015
- 24. This permit is valid only at this location. TAPCR 1200-03-09-.03(6)

25. This construction permit shall serve as a temporary operating permit from its issuance until the receipt of a standard operating permit, provided the operating permit is applied for within sixty (60) days of the expiration date of this construction permit, and provided the conditions of this construction permit and any applicable emission standards are met. TAPCR 1200-03-09-.02(3)(a)

The operating permit application shall be submitted to the East Tennessee Permit Program at the address listed below or via e-mail.

East Tennessee Permit Program
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15TH Floor
Nashville, TN 37243

Adobe Portable Document Format (PDF) Copy to: <u>Air.Pollution.Control@tn.gov</u>

(end of conditions)

The permit application gives the location of this source as 36°28'54.9" Latitude and -82°30'39" Longitude.

or

(ATTACHMENT #1)

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, the permittee must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of ≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of ≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	